Список публикаций П.В. Осиненко
Научные статьи в рецензируемых журналах и конференциях

П.В. Осиненко

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Общая статистика публикационной активности

Метрика	Значение
Всего публикаций	44
Публикаций первым автором	26
Период публикаций	2014-2025
Среднее количество публикаций в год	5.5

Статистика цитирования

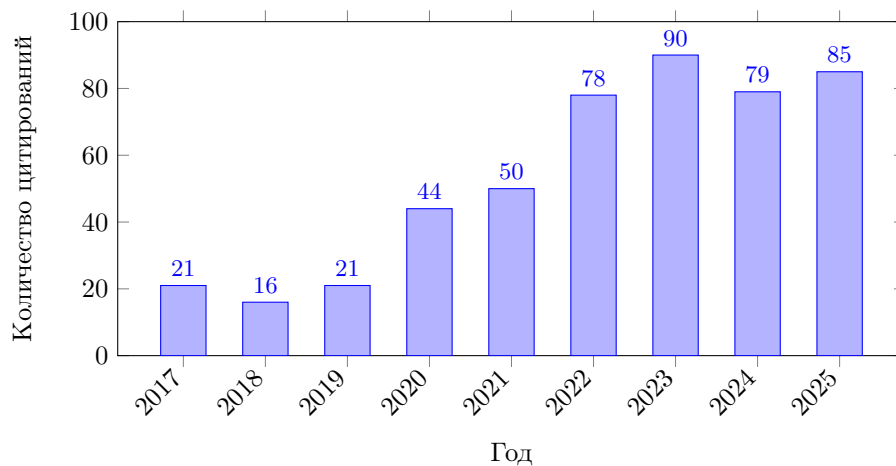| Метрика	Все	Начиная с 2020 г.
Процитировано	512	428
h-индекс	11	11
i10-индекс	14	12

Цитирования по годам

Рис. 1: Динамика цитирований по годам

Основные направления исследований

- **Теория управления и автоматизация** - 47 публикаций

- **Машинное обучение и искусственный интеллект** - 30 публикаций

- **Оптимизация и алгоритмы** - 10 публикаций

- **Сельскохозяйственная робототехника** - 5 публикаций

- **Энергетические системы** - 2 публикации

Ведущие журналы и конференции

- **IFAC-PapersOnLine** - 11 публикаций

- **IEEE Access** - 10 публикаций

- **IEEE Control Systems Letters** - 5 публикаций

- **IEEE Transactions on Automatic Control** - 5 публикаций

- **Control Engineering Practice** - 2 публикации

Публикации

Lukas Beckenbach, Pavel Osinenko, Thomas Gohrt, and Stefan Streif. Constrained and stabilizing stacked adaptive dynamic programming and a comparison with model predictive control. *2018 European Control Conference (ECC)*, pages 1349–1354, 2018.

Lukas Beckenbach, Pavel Osinenko, and Stefan Streif. Model predictive control with stage cost shaping inspired by reinforcement learning. *2019 IEEE 58th Conference on Decision and Control (CDC)*, pages 7110–7115, 2019.

Lukas Beckenbach, Pavel Osinenko, and Stefan Streif. A q-learning predictive control scheme with guaranteed stability. *European Journal of Control*, 56:167–178, 2020.

Lukas Beckenbach, Pavel Osinenko, and Stefan Streif. A stabilizing reinforcement learning approach for sampled systems with partially unknown models. *International Journal of Robust and Nonlinear Control*, 34(18):12389–12412, 2024.

T. Bögel, P. Osinenko, and Th. Herlitzius. Assessment of soil roughness after tillage using spectral analysis. *Soil and Tillage Research*, 159:73–82, 2016.

Dmitrii Dobriborsci, Ilya Chichkanov, Roman Zashchitin, and Pavel Osinenko. Model-based reinforcement learning experimental study for mobile robot navigation. *2024 10th International Conference on Control, Decision and Information Technologies (CoDIT)*, 16:1825–1830, 2024.

Dmitrii Dobriborsci, Pavel Osinenko, and Wolfgang Aumer. An experimental study of two predictive reinforcement learning methods and comparison with model-predictive control. *IFAC-PapersOnLine*, 55(10):1545–1550, 2022.

Mike Geissler, Pavel Osinenko, and Thomas Herlitzius. Winding switching strategy for electric wheel drives in agricultural machinery. *2015 IEEE International Conference on Industrial Technology (ICIT)*, pages 851–856, 2015.

Thomas Gohrt, Pavel Osinenko, and Stefan Streif. Adaptive dynamic programming using lyapunov function constraints. *IEEE Control Systems Letters*, 3(4):901–906, 2019.

Thomas Göhrt, Fritjof Griesing-Scheiwe, Pavel Osinenko, and Stefan Streif. A reinforcement learning method with closed-loop stability guarantee for systems with unknown parameters. *IFAC-PapersOnLine*, 53(2):8157–8162, 2020.

Thomas Göhrt, Pavel Osinenko, and Stefan Streif. Adaptive actor-critic structure for parametrized controllers. *IFAC-PapersOnLine*, 52(16):652–657, 2019.

Sinan Ibrahim, Mostafa Mostafa, Ali Jnadi, Hadi Salloum, and Pavel Osinenko. Comprehensive overview of reward engineering and shaping in advancing reinforcement learning applications. *IEEE Access*, 12:175473–175500, 2024.

Alexander Kobelski, Pavel Osinenko, and Stefan Streif. A method of online traction parameter identification and mapping. *IFAC-PapersOnLine*, 53(2):13933–13938, 2020.

Alexander Kobelski, Pavel Osinenko, and Stefan Streif. Experimental verification of an online traction parameter identification method. *Control Engineering Practice*, 113:104837, 2021.

Maria A. Larchenko, Pavel Osinenko, Grigory Yaremenko, and Vladimir V. Palyulin. A study of first-passage time minimization via q-learning in heated gridworlds. *IEEE Access*, 9:159349–159363, 2021.

Alexander Morozov, Mikhail Pugach, Andrey Polyakov, Pavel Osinenko, Anton Bolychev, Vladimir Terzija, and Sergei Parsegov. Optimal flow factor determination in vanadium redox flow battery control. *IEEE Access*, 12:19277–19284, 2024.

P Osinenko and S Streif. Analysis of extremum value theorems for function spaces in optimal control under numerical uncertainty. *IMA Journal of Mathematical Control and Information*, 36(3):1015–1032, 2019.

Pavel Osinenko, Lukas Beckenbach, Thomas Göhrt, and Stefan Streif. A reinforcement learning method with closed-loop stability guarantee. *IFAC-PapersOnLine*, 53(2):8043–8048, 2020.

Pavel Osinenko, Lukas Beckenbach, and Stefan Streif. Practical sample-and-hold stabilization of nonlinear systems under approximate optimizers. *IEEE Control Systems Letters*, 2(4):569–574, 2018.

Pavel Osinenko, Konni Biegert, Roy J. McCormick, Thomas Göhrt, Grigory Devadze, Josef Streif, and Stefan Streif. Application of non-destructive sensors and big data analysis to predict physiological storage disorders and fruit firmness in 'braeburn' apples. *Computers and Electronics in Agriculture*, 183:106015, 2021.

Pavel Osinenko, Dmitrii Dobriborsci, and Wolfgang Aumer. Reinforcement learning with guarantees: a review. *IFAC-PapersOnLine*, 55(15):123–128, 2022.

Pavel Osinenko, Dmitrii Dobriborsci, Grigory Yaremenko, and Georgiy Malaniya. A generalized stacked reinforcement learning method for sampled systems. *IEEE Transactions on Automatic Control*, 68(11):7006–7013, 2023.

Pavel Osinenko, Mike Geissler, and Thomas Herlitzius. Adaptive unscented kaiman filter with a fuzzy supervisor for electrified drive train tractors. *2014 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE)*, pages 322–331, 2014.

Pavel Osinenko, Mike Geissler, Thomas Herlitzius, and Stefan Streif. Experimental results of slip control with a fuzzy-logic-assisted unscented kalman filter for state estimation. *2016 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE)*, pages 501–507, 2016.

Pavel Osinenko and Stefan Streif. Optimal traction control for heavy-duty vehicles. *Control Engineering Practice*, 69:99–111, 2017.

Pavel Osinenko, Grigory Yaremenko, Roman Zashchitin, Anton Bolychev, Sinan Ibrahim, and Dmitrii Dobriborsci. Critic as lyapunov function (calf): a model-free, stability-ensuring agent. *2024 IEEE 63rd Conference on Decision and Control (CDC)*, pages 2517–2524, 2024.

Pavel V. Osinenko, Mike Geissler, and Thomas Herlitzius. A method of optimal traction control for farm tractors with feedback of drive torque. *Biosystems Engineering*, 129:20–33, 2015.

Ilya Osokin, Ilya Ryakin, Sina Moghimi, Mikhail Patrikeev, Ilya Barsky, and Pavel Osinenko. Neural network-based classification for automated powdery mildew detection in modern tomato greenhouses. *IEEE Access*, 12:86782–86789, 2024.

Franz Rußwurm, Pavel Osinenko, and Stefan Streif. Optimal control of centrifugal spreader. *IFAC-PapersOnLine*, 53(2):15841–15846, 2020.

Patrick Schmidt, Pavel Osinenko, and Stefan Streif. On inf-convolution-based robust practical stabilization under computational uncertainty. *IEEE Transactions on Automatic Control*, 66(11):5530–5537, 2021.